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EDITORIALLY SPEAKING

TIMELY

The response to the first issue of *The Journal of Educational Method* is most reassuring. "There is a place for this new journal," says one well-known editor. "I will do anything I can to help it along," says another. "This first number is a very valuable contribution," is the comment of a school superintendent. In one large city every principal of an elementary school is enrolled in the Conference and will read the *Journal*. In similar fashion the faculty of one of the two best-known state normal schools in the United States has joined as a body. There seems to be a general recognition of the fact that in the long run it is method and not material equipment that makes the school. Method is, of course, greatly aided by equipment, but equipment without effective method is all but worthless. The numerous letters from editors of the excellent state and city periodicals scattered through the country, welcoming a serious journal of method in teaching and in supervision, which have been received, are particularly gratifying. What better provision for their professional reading could principals and their teachers make than a subscription to their state organ and one to *The Journal of Educational Method?* For the encouragement so warmly extended by our brother-editors, our best thanks.

PRINCIPLES VS. PATTERNS

For quick and easily obtained results use a formula. If you seek continued growth, inculcate ideas. Educational leaders are always confronted by those two alternatives. Some choose the former. They talk naïvely of "introducing" this or that procedure or newest educational wrinkle into their schools much as they do of installing a new heating-plant or a new system of accounting. "Supervised study" and the "socialized recitation" are notable examples. One principal announced gravely, "On November 18 we will begin supervised study in our school." Yet the report of one of the most thorough-going investigations of the plan of supervised study shows that it is only in case the teacher is fully alive to his opportunity and has adequate training in the technique of directing study that any appreciable good comes of lengthened periods and other devices employed in what is called supervised study. There is no substitute for working ideas. Those who attempt a short cut by the presentation of patterns instead of the inculcation of principles are deceiving themselves. Education of children requires something more than mere *training* of teachers. Fads are a poor substitute for philosophy. The best type of direction is genuinely intelligent self-direction.

A SUPERVISOR'S EXPERIENCE IN DIRECTING A TRY-OUT OF THE PROJECT METHOD

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It is always a great joy to speak about a matter concerning which one has a deep-seated conviction. It is therefore with very great pleasure that I shall recount a bit of personal experience in attempting to arouse a group of uninitiated teachers and to give each a whole-hearted purpose to develop a project activity in her own classroom. The story is by no means unique. Undoubtedly many progressive supervisors are today absorbingly interested in their own project of finding a way to introduce learning through projects into schools where as yet the method applied to education is either unknown or else doomed to vigorous opposition at the start. Those who believe that the *method* of teaching is highly important are already asking themselves the question, "How can we get the project method of learning launched in schools of the traditional type?" The purpose of my paper is to offer at least one answer to this question.

A REASON FOR MY GRIPPING INTEREST

My own deep-seated conviction regarding the value of the project method of instruction in our schools has grown out of my complete confidence in democratic living. Some one has called this democracy of ours "the great social experiment of civilization." Perhaps it is still in the experimental stage but certainly a subsequent stage of great positive achievement awaits it if we but provide for its direction competent, well-qualified leaders and supply these with loyal, right-thinking, happy followers. Failing of such provision, our great democracy stands in grave danger and imminent peril. The remedy lies within the power of school authorities and must be applied in schoolrooms of the present day. With us rests the great responsibility of providing the able leaders and intelligent followers who can stem the disrupting tide and carry this great nation on to future accomplishments for humanity, the greatness of which outdistances all powers of prediction.

Right and effective ways of democratic living cannot be acquired over night. Rather they are subject to the laws of habit-building. They grow with the child. They grow more beautifully when fostering and pruning are administered day by day by the understanding teacher who has been especially trained in the art of guiding, whose chief business is guidance. This, as I see it, is a strong argument *against* an autocracy and *for* a democracy in the schoolroom. Such democratic living in the school can be promoted by the project method of instruction. It is because of this feature of the work that learning through projects has held me with gripping interest. A great love of democracy and an unbounded belief in its possibilities for good tend to lead progressive supervisors to a try-out of the project method of instruction, a setting up within the classroom of democratic procedure under the expert guidance of the teacher.

WAYS IN WHICH THE PROJECT METHOD OF INSTRUCTION MAY BE INTRODUCED INTO SCHOOLS OF THE TRADITIONAL TYPE

Various ways have been suggested by which the project method of learning may

be introduced into schools of the traditional type. Those which I shall mention are said to have been successfully used in Detroit. They have succeeded in Boston and have been introduced in other places. They are:

First, voluntary preparation by the teacher. Incentives may be provided through regular courses at normal schools and institute instruction such as Detroit offers.

Second, a lecture approach. This is a convenient means if teachers are organized into a club or an association. It has succeeded well in Detroit.

Third, a course of instruction offered for the upgrading of teachers, that is, for their improved professional preparation during service. This plan has been used effectively in Boston.

Fourth, by special appeal to individual teachers, who, in the judgement of the supervisor, are well adapted to introduce an innovation with success. This plan is common wherever experimentation has the sanction of the school community and the supervisory officers. It involves, besides a judicious choice of the teachers who are to make the try-out, a tactful setting forth of the aim to the teaching force, and such diplomatic promotion of the extension of the experiment as will prevent struggles which sometimes hamper the growth of a worthy cause.

Fifth, through grade meetings at which are displayed objective results of exceptionally fine projects worked out by the few who have shown early interest. In this connection the use of moving pictures illustrating certain steps in the project activity are most useful. To carry out this plan the full sanction of principals of buildings is necessary.

Sixth, through library and museum exhibits of tangible achievements. These may prove highly suggestive as the work progresses. They have been effectively used in Boston, Detroit, and other places.

Frequently it becomes necessary to undertake a definite campaign to enlist the favorable attitude of principals of buildings and the sanction and co-operation of school communities. In this connection a committee with which I was associated last summer recommended the following:

1. A judicious use of the press in reporting teachers' meetings of importance and current school projects. It might even provide for a school column carried on as a school project or a city or town project.

2. Demonstration and discussion of school projects on the occasion of parents' day.

3. Addresses before clubs, institutes, and teacher-parent associations.

4. Avoidance of criticism because of lack of balance or perspective in the work by giving proper place to such factors as skill in reading, writing, spelling, and arithmetic.

5. Project exhibits at county or state fairs.

A SUPERVISOR'S EXPERIENCE IN COMMUNICATING THE PROJECT METHOD

My own approach to the introduction of the project method came about through a course of instruction which I gave in the fall of 1919 for the up-grading of teachers in the service. It was made possible by a regulation of the school board of our city. Teachers who have taught two years or five years receive their next increment in salary only by satisfactorily meeting a requirement of additional preparation. Part of this requirement is fulfilled by

successful accomplishment in courses sanctioned or provided by the city school authorities. Courses offered at colleges of standing are, of course, among those which receive the city's sanction. Candidates for promotional credit are free to make their own choice of courses. I was requested by the assistant superintendent who had charge of promotional credit to give a course on the project method. I advertised not the project method, but the problem-project method, because I wanted to have it well understood that the course would include projects which might be purely intellectual. Now it happened that I once taught in our city normal school and that during the closing years of my work there my subject was methods in arithmetic. You will readily see, then, why some of the younger teachers who chose my promotional course came thinking I was going to give them some sage advice on how to get their classes to solve arithmetic problems. I mention this circumstance that you may realize how little disposition to investigate the project method was present the first night of our meeting. We began our course by getting answers to a little questionnaire, and I thereby found that, with the exception of one person, not a teacher in my class knew the slightest thing about the project method applied to education or had ever even heard of it. A later testimony of a member of the class, given after the close of the course at a meeting of prevocational teachers, was that the project idea seemed so foreign to this particular group of teachers at the start, that for the first few lessons they were wholly uninterested in the work and even tempted to give it up, but as the course progressed their growing enthusiasm was matched only by that of their own pupils, who were soon carrying out purposeful activities with surprising zeal.

Very early in the promotional course the teachers adopted as their own project, the launching and carrying on of a project in each teacher's classroom. We discussed the possibilities, set a night for reports from each on preliminary happenings in their own classes, and when the night arrived we gave our collective judgments as to the wisdom of the projects which the children had expressed a desire to undertake. As a result, very many acceptable ones were soon in full swing. We met two evenings a week and consulted about all difficulties that arose in any classroom and shared the news of little successes. Experiences thus recounted gave courage to the faint-hearted. At each meeting I offered what counsel I could and was able besides to add a little to a clearer understanding of the fundamental philosophy of project work and the essential characteristics of its application in various specific situations. No reading was required, though a selected bibliography was given for use by such enthusiasts as might wish to read, but it was understood that the teacher's energy was needed for the experimental project going on in her classroom. It was not long before the group purpose was somewhat recast. It now became a purpose to make a genuine contribution to education in the form of a collaborated account in print of their own classroom experiences related to learning through projects. As a result several good manuscripts were written.

It will be seen from my account that the teachers who conducted this work so successfully were just the rank and file of teachers in a large city system. They were not a picked group, enamored of the project method or unmistakably characterized by

college-degree ambitions. Yet they became centers of influence to nearby teachers. If time allowed, I could tell you how, in each school district where they taught, other teachers were inveigled into trying to follow their example. Most of the enticement came through their own pupils who pleaded in some such words as, "Please can't we have a civic league like Miss Ford's children?" or "Can't we have a milk campaign and gather booklets like Miss Harrington's class?" Sometimes the teacher was urged out of a mere *pretense* at project activity when children in a neighboring class where a *real* project was under way asked if they could not help her children to get material as they did not seem to know how to find it for themselves. And thus the leaven had begun to work.

A few of the projects undertaken may prove of interest. One fourth grade adopted a project in connection with its study of "Typical Regions and Centers Related to Boston" (a requirement of the course of study). The children called it, "Finding Out Who Are South Boston's Providers and Friends." The working out of this project brought about many visits to neighborhood stores, a canvass of household food and clothing for evidence of sources of supply, a classification of knowledge thus obtained, the making of individual and class scrapbooks, and much other self-directed activity productive of definite progress in work prescribed for the grade. The teacher, a tiny, gentle lady, reported night after night her utter amazement at what her children could do.

Another fourth-grade project was connected with the work required in the hygiene of food and drink. This was called, "A Milk Campaign." It culminated in a play, "The Milk Fairies." The teacher recounted an amusing incident of a little girl who tried to secure from the Whiting Milk Company a large milk bottle she had seen on the top of their building. She wanted one large enough to allow several children to enter. She made a number of visits to the store and finally the Company responded to the child's request by sending from the factory a large cardboard bottle which had doors that opened and closed. Her delight was unbounded, for had she not contributed much to the success of the play? The follow-up activity of the children accomplished a great increase in milk drinking by the members of the class. All either acquired newly or increased a milk-drinking habit.

An interesting fifth-grade project was built around a kind of slogan, "We live in the schoolroom five hours a day, why not make it a pleasant place in which to work?" This project connected definitely with the grade requirement in history concerning the stories of some of the chief settlements on the American coast and the lives of a few of our great American leaders. Learning directly connected with requirements of their course of study in English and science were by-products. The work brought about the formation of many committees which assumed various responsibilities such as fresh decorations for every holiday, letters of invitation, and letters requesting information. There were also many other accomplishments which could be checked off on the prescribed work of the grade. A lecturer from the Art Museum answered a request from the class for a lecture on the Pilgrims. At first she had asked the privilege of lecturing on a different subject because she had so few pictures of the Pilgrims, but the chairman of the committee refused to accept a substitute lecture; so

she brought what pictures she could get and supplied his demand.

A sixth grade made an excellent magazine. This project improved the children's command of English to a surprising degree. The boy who had never exerted an effort in school in his life got himself elected chairman of the Joke Committee. The jokes steadily improved in point and also in their connection with school-life interests.

Another sixth grade formed a Junior Civic League, and much of their activity connected in vital ways with both community civics and personal hygiene. One parent, who had persistently refused to supply his child with much-needed glasses, yielded to the persuasive arguments of her classmates and the glasses were forthcoming. Dental care was given to every tooth in the room that needed attention.

Many more illustrations of the projects guided by these, until then, uninitiated teachers might be given. Those already mentioned, however, will suffice to indicate the types of activities which were launched in their classes in the first bloom of their interest in the possibilities of learning through projects.

CHECKING THE RESULTS OF STIMULUS

The first promotional course already described was a general course involving the fundamental philosophy and the principles of application. It was followed in the fall of last year by other promotional courses dealing with project work in specific fields of teaching, such as primary grades, manual arts, oral expression, and history. Previously, a stimulus had been created in the primary grades by the work of a small committee which had sought to bridge the gap between the kindergarten and the first primary grade. This committee had prepared a small pamphlet, published as a school document, which suggested projects for Grade I.

Prevocational teachers of shop and academic classes has been stirred to activity by the leadership of their zealous special supervisor and by the lecture appeal.

Recently the results of the various causes of stimulation have become strongly apparent. Teachers of every grade, the high-school group inclusive, have been showing marked interest in instruction through projects. Requests for lectures have been received from groups of high-school teachers, normal-school faculty, and others. Indications of progress in interest have been highly encouraging. I have thought that we should begin to take account of stock. Accordingly, with the consent of the superintendent, a questionnaire was sent to the elementary-school principals through the machinery of our Department of Educational Measurement. There is now under way a cataloging of our resulting information for ready reference. The responses to the questionnaire have revealed a wonderful harvest, an amazing growth in project activity. Sixty-seven school districts reported purposeful work carried on by the children. The accomplishments indicated in the reports received connected with grade requirements in geography, history, hygiene, nature work, arithmetic, and English. A few illustrations of specific projects undertaken are "A Japanese Tea Party," "A Spanish Party," "Following President Harding's Trip by Pictures," "The Building of Stockyards," "A Debating Society," "A Banking Business," "The Conducting of a Newspaper," and The Organization of an Anti-cigarette League.

It is not to be denied that care must be

taken in evaluating our reports. We must always allow for the too great eagerness with which some are ever ready to seize upon the new and attempt to promote it before making a sufficient study of the basic philosophy and fundamental principles which must govern its development. These are they who may label as project work something which is not genuine. They may put forward a perfectly good and long familiar type of problem work and call it a project, but it may fall short of the "great adventure," the typical unit of life-experience, the bit of democratic living which is brought about by our ideal project.

It will be seen that the account of my experience has dealt merely with the *launching* of the project method of learning in schools of the traditional type. No attempt has been made to offer suggestions of helps by the wayside, though these will most surely be needed after teachers have actually embarked on their interesting, I had almost said perilous, journey. I suppose all true adventures have their perils. Help, then, ready at hand, there must be, and supervisors must ever be prepared to apply it with art. Words of encouragement, a caution here and there, scraps of kind advice, even direct information will always be needed by teachers undertaking for the first time to teach through projects. Their need of inspirational help all along the way will be the same regardless of the type of appeal to which they have responded at the start. They may belong to the first class we have mentioned, those splendid volunteers who have sought inspiration in visits to normal schools or in institute experiences; they may have responded to the call as they listened to a lecture delivered expressly to arouse their willingness to venture; they may have caught the spirit while attending a professional course baited, perhaps, with a reward which made another appeal at the start; they may have been sought out individually as persons especially well qualified to make a success in experimentation and to cause the spread of improved methods, or they may have embarked on the enterprise because of some other appeal not herein set forth, but whatever it be that caught them, they will need inspiring help throughout their march from the traditional, formal type of teaching toward the ideal on which is fixed the hope of the supervisor who believes that child life is, after all, just life, that the child lives just as truly from his first to his fourteenth year as he does from his fourteenth year to his seventieth, and that differences in his response to environment at seven or fourteen or seventy are occasioned only by the varying amounts of his experience.

THE WIDER STUDY OF METHOD[1]

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A second meeting of teachers

"You recall our discussion of a month ago about the two ways of looking at method. That matter has ever since been a good deal on my mind, but there are several questions I wish to ask."

A review and summary is requested

"Before you begin with the further discussion won't you tell me what was said before, I mean your conclusions; I wasn't here then and I haven't understood the references I have been hearing to the two problems of method. What are they?"

"We concluded first of all that just as we need to study the curriculum to find out *what* to teach, so we need to study method to find out *how* to teach. When we came more closely to the question of method we found there were two problems of method: one long recognized, the problem of how best to *learn*—and consequently how best to *teach*—any one thing, as spelling; the other less often consciously studied, the problem of how to treat the learning child, seeing that he is willy-nilly learning not one, but many things all at once, and that we teachers are responsible for all that he learns. The first of these problems we called the narrow view of method; the second, the wider view of method."

"I begin to see what you mean. But why do you say 'narrow' and 'wider'? Do you mean to disparage the one and exalt the other?"

"By no means. The one is narrow because it considers only one thing at a time, the other is broader because it takes into account many learnings all going on at once. But there is no wish or willingness to disparage the narrow view. Some of us think the psychology of learning which undertakes to answer the first problem is the most notable single contribution that psychology has thus far to offer."

"Won't you say a further word about the wider view of method? I don't get exactly what you mean. The idea is so new I don't fully grasp it."

The wider view of method is again discussed

"Well, if the others don't mind hearing it again, I'll gladly explain how we saw it a month ago. As it seemed to us, any child during an educative experience learns not merely the one thing he is supposed to be engaged in, say a grammar lesson, but is also at the same time learning well or ill a multitude of other things. Some of them may be: how he shall study, whether with diligence or the reverse; how he shall regard grammar, whether as an interesting study or no; how he shall feel toward his teacher, whether as friend and helper or as a mere taskmaster; how he shall regard himself, whether as capable or not; whether or not he shall believe that it pays to try (in such matters as grammar); whether to form opinions for himself and to weigh arguments in connection; how he shall practically regard government (school, home, wider), whether as alien to him and opposed to his best interests, a mere matter of contrary superior force, or as just and right, inherently demanded, and friendly to his true and proper interests. This by no means exhausts the list, but it will give you some idea of what we had in mind in saying that many things are being learned at

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once. You will also see how important some of these attendant learnings are, and I believe you will agree with us that whether they are well learned depends in great measure on how the teacher treats the children."

"You are right, I am sure, and I see, too, how important the recitation period is. Isn't this what some people have in mind when they speak of the 'socialized recitation'?"

The "socialized recitation"

"Yes, undoubtedly, only I have not seen any attention called in connection with it to this central and underlying fact of many simultaneous learnings. The 'socialized recitation' by its emphasis on the social situation fixes attention upon an important source and matrix of simultaneous learnings. Think how many things go on in a properly conducted recitation and how favorable for learning are the conditions. The conscious presence of others engaged with us on a common problem gives stimulation or thought, furnishes occasion for the exercise of many kinds of social behavior, and provides the critical and approving situation so useful for effectual learning. Yes, the 'socialized recitation' is a noteworthy attack upon the wider problem of method."

"I begin to wonder whether these attendant learnings are not just as valuable as the learning that is generally more immediately in our consciousness. Are not our practical ideals and attitudes built largely in this incidental way? Go back to the grammar lesson. Isn't the boy in just such everyday experiences building his actual ideals, I mean the ideals and attitudes he actually lives by? Isn't it in this way that he becomes accurate or slovenly in his thinking, efficient or not in attacking problems, courteous or discourteous in his dealings with others, honest or dishonest in doing his work? It begins to seem to me that it is mostly in these concomitant learnings that the important things of life are found rather than in the school subjects as we commonly think of them. What do you say?"

The importance of the concomitant learnings

"Before we take that up I think it might help if I introduced some terms I heard at summer school last session. The word concomitant you used just now was one of them. The terms as I got them were primary, associate, and concomitant. The word 'primary' was used to refer to all the learning that belongs closely to the thing immediately under consideration: If I am making a dress, then the primary includes all the learning that comes from the actual making, such as increased skill in planning and cutting. The term 'associate' is usually found in the phrase 'associate suggestions' and refers to all those allied thoughts or ideas that come from working on the dress, but which if followed up then would lead me away from my dressmaking. I may thus be thinking whether the dress will wash, and so think about the dye used, and ask myself how such dyes are prepared. This in its place is a valuable and proper question, but I do not need to answer it in order to make this dress, and if I do try to answer it, I must for the time lay aside my dressmaking. The 'concomitant' learnings grow (in part at least) out of the dressmaking, but do not belong so closely or exclusively to the dress as do the primary. I may thus say, 'I see it pays to be careful.' I learned this, perhaps in connection with making the dress, but it should remain with me as an ideal that will reach beyond dressmaking. In general we may say that the

Terms to designate the differentiated outcomes of an educative experience

concomitant learnings have to do with more generalized ideals and attitudes, while the primary learning has rather to do with specific knowledges and skills. The concomitant is typically of slower growth, requiring perhaps many successive experiences to fix it permanently in one's character. Prominent among concomitants are personal attitudes, attitudes toward one's teachers or comrades, attitudes toward the several subjects of study (as geography or history), attitudes toward one's self, such as self-reliance or pride or humility. Other important concomitants are standards of workmanship and the like, neatness, accuracy, or the reverse."

"I see what you mean, but why must you introduce more 'terms,' as you call them? If you people that study and read books would only learn to use everyday words, you'd be much more popular and do much more good. And why do you choose such outlandish words for your terms? Who ever uses such a word as concomitant? Why don't you choose a short word? But I didn't mean to offend you."

The use of terms

"You didn't really offend me. I suppose it was another case of 'pride going before a fall.' I was proud of myself that I had made my meaning clear, for I confess I had trouble last summer in getting the idea. And you are in good company in wishing for simpler terms, for I remember the professor said that he felt he ought to apologize for such long words and he asked us to suggest shorter ones, only we couldn't. But you, in my judgment, are wrong in objecting to 'terms.' They help us to think. Why, ever since I got these distinctions I can see the things themselves much clearer. In fact I never really saw the things in my pupils until I got these distinguishing terms. I tell you a name is the way to hold and spread an idea. When you talk about a thing and give it its proper name, you yourself have something to hold to, while other people begin to ask what is meant and to look for the thing back of the name. Without terms there would be little exact thinking."

"I suppose you are right. It sounds reasonable. At any rate, I can't argue against you. But I wish you would explain how you actually use these terms primary, associate, and concomitant."

The use of the designative terms

"Principally they make me critical of my work. I mean they help direct my self-criticism. I used to be content if my pupils didn't miss in daily recitation work and could pass on the term examinations. I thought that was all. Now I know better. That was being satisfied with the *primary* only. I never thought about the associate suggestions and but little of what I now call concomitants. It is not that I do not value the primary now, I do value it perhaps just as much as before, only differently, more intelligently, I believe. But I think a great deal more about the other two.

Associate suggestions

"It used to be that I was often impatient if my children asked questions suggested by the lesson but not on the lesson. You see my eyes were glued on the course of study, and I thought of these questions only as mind wandering. I still am troubled to keep the class sufficiently intent on the matter at hand, but I feel differently about the outside questions and I act differently. Now I feel that I and my pupils are really succeeding when these associated suggestions arise. Properly used, they mean growth. We don't yield to the present inclination to follow them up, but we do notice them enough to see whither they invite us. Sometimes we write them

down for future use. And I see a different attitude is already growing up in the class. They are more thoughtful. Associated suggestions noted in the past come up again in their right places, and James or Mary is proud to have foreseen the point. They feel differently toward me too. We seem to be working more sympathetically, and we really enjoy thinking things out together and connecting them all properly. I find that I respect my pupils more, or really the advance connections they see are remarkable. And they think more connectedly now, instead of less connectedly as I feared. Their organization is much better. You see I was beforetimes repressing rather than encouraging their natural inclinations to think.

"And as for the concomitants, I am now much concerned about them, particularly as to what attitudes are being built and how I can help forward the better ones. I see now that I always valued those things, the ideals and attitudes of my pupils; but I didn't concern myself consciously and specifically about them. I somehow trusted to luck for them. I was a kind of fatalist about them. The pupils who were going to have good ideals were going to have them, and that was all there was about it. I scolded sometimes and criticized a good deal, but I now think that in so doing I did more harm than good. Now I know that each ideal and each attitude has a life-history of its own, each is built up just as truly as is any fact of knowledge or any skill."

Concomitants

"It seems to me that you are now contradicting yourself. Earlier you were speaking of these attitudes as being built incidentally. Now you talk as if you seek them directly. Which is right?"

Are attitudes sought directly?

"So far as the child is concerned they are principally built incidentally, that is, in connection with other purposes of his. I as teacher, however, must be conscious of what he is doing and steer his various activities so that the proper ideals and attitudes shall actually grow up. I seek them directly, he achieves them—for the most part—indirectly. But at times we do talk matters over, because clear consciousness is often an important factor in building ideals."

"I understand you now on that point, but I wish to ask further. Do you then judge each thing the children do under these three heads of primary, associate, and concomitant?"

Is each act to be judged in these terms?

"Typically, yes. Each study period, each recitation period, and each recess is in its own measure going to result in primary learning of some kind well or ill done, in few or many, rich or poor, associated suggestions, in good or bad concomitants. As teacher I am in some measure responsible and in so far I must know what is going on and adequately appraise the results. In the light of the results—so far as I do or could influence them—am I to be judged."

"Isn't it different now? If I understand you aright, we examine and promote almost if not entirely on the primary learning, and disregard the other two."

The primary is now too much stressed

"Yes, I think we do. You see we can test the primary learning so much more easily than we can the others. The new scientific tests and measures of achievement even reinforce the tendency to pay exclusive attention to the primary, because they are so far for the most part confined to the more mechanical skills and knowledges. I sometimes fear their first effect

will be to fasten the merely mechanical side of school work even more firmly on our schools."

"Well, you certainly surprise me now. You have always been eager for each new advance of science, as I have heard you say, and here you are decrying what you must admit is at least one of the most scientific steps yet taken in the study of education. I didn't expect it of you."

The danger in the new tests

"The new tests are indeed a contribution of the very first value, but what I say is still true. So far as they measure achievement they are up to now largely confined to the more mechanical aspects of learning. A superintendent gives a series of tests in spelling, arithmetic, or reading. Sooner or later the teachers learn the records of their classes, and unless the superintendent is wise they will find themselves rated according to these records. If the superintendent could as satisfactorily measure the teacher's success in building ideals and attitudes, so that all the educational outcomes could be weighed, the situation would be different. But as matters now stand the superintendent is in danger of taking the teacher's attention away from the "imponderables," the ideals and attitudes and moral habits that cannot yet be measured in wholesale quantities, and of fastening that attention upon a part only of the educational output and that the most mechanical. This is no fanciful picture, I assure you. The danger is very real. Such considerations as this make me look earnestly for the day when we shall be able to measure the whole gamut of achievement. I believe that day will come and a great day it will be. Till then, however, I should advise superintendents to look carefully how they use the tests. Use them, but with a clear sense of their limitations and dangers. In the meanwhile the greater reason for urging attention to the wider problem of method. We must make everyone see the value of the concomitant learning and of the associate suggestions. Every recitation period, every school exercise must be appraised under all three heads of primary, associate, and concomitant."

The greater need to study method

"If you made your expression even stronger, I should not object. When I consider that while we are stressing arithmetic, for example, our children are forming at the same time the very warp and woof of their moral characters, I shudder to think of the consequences if our teachers see only the arithmetic and ignore the life-attitudes being built. Fortunately, there is no necessary opposition between the two, rather the contrary; but nothing can excuse us for failing to consider those other outcomes that inevitably accompany every school activity."

The wider problem of method is the problem of life

"The wider problem of method seems to me now to be almost the same as the moral problem of life itself. As I now see it, our schools have in the past chosen from the whole of life certain intellectualistic tools (skills and knowledges), arranged these under the heads of reading, writing, arithmetic, geography, and the like, and have taught these separately as if they would, when once acquired, recombine into the worthy life. This now seems to me to be very far from sufficient. Not only do these things not make up the whole of life; but we have so fixed attention upon the separate teaching of these as at times to starve the weightier matters of life and character. The only way to learn to live well is to practice living well. Our highly

artificial study of arithmetic and geography and physics has too often meant that the child lived but meagerly in and through the school studies. The practice of living that has in fact counted most for him has too often been what he and his like-starved fellows could contrive for themselves apart from their elders. Educative indeed has this been, but not always wisely so. There is no cause for wonder that American citizenship disappoints. Democracy demands a high type of character. Our schools have not risen to the demand upon them."

"Do you mean that the wider problem of method especially concerns building for citizenship?"

"That is exactly what I mean. It has always been so. Without clearly distinguishing what they did, or rather how the results have been attained, each long-abiding type or ideal of civilization has contrived its answer to this wider problem of method in such fashion as to mold the type of character correlatively needed to perpetuate itself. The Spartan and the Athenian of antiquity differed from each other quite as much by reason of different methods of education as because of the different contents of the curriculum. The proverbial "hardening" of the former was sign and result of the treatment accorded their youth. The slave of every age has by well-contrived processes been made lowly in spirit the more contentedly to bear his hard lot and lowly station. Civilizations have differed much as to whether the individual man should think for himself: those opposed to such thinking have always contrived such methods of treating their young as early habituated them to acquiescence in the officially approved opinions. Prussia, old China, Mahomet, the Jesuits, the older military discipline, all represent various efforts along this line. These have differed among themselves almost *in toto* as to the primary learning they have sought to inculcate; but they have been agreed markedly in the methods of inculcating the concomitants, the desired attitudes.

To each civilization its type of method

"We then in this country must study anew the (wider) problem of method in order the more adequately to devise the proper treatment of our young so as to fit them for democratic citizenship. The beginning of this wisdom, I believe, is to recognize the fact that the child learns many things at once. On this rock of simultaneous learnings shall we by proper effort rear the needed structure of an all-round character."

To America its appropriate method

AN EXPERIMENT IN CO-OPERATION

II. READING WITH A PURPOSE

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In the preceding article of this series a brief account was given of how certain selected schools in Chicago set to work to make definite improvement in the teaching of English. One of the important problems attacked was that of study reading. This was approached in the light of the principle that in good reading there is specific purpose to guide the process. The reader regards the ideas found as provisional

and checks them up in the light of the whole, of the *aim* which the writer is seen to be carrying out. We will now review some of the steps that were taken in applying that principle.

THE TEACHERS STUDY THE PROCESS OF READING

In the first place, the teachers were invited to verify the principle for themselves. Various passages were read with these questions in mind: "At what point do I first see clearly what the passage is intended to do? Regarding the passage as essentially the answer to a question, how many and what chief points do I find? Is the answer full, clear, and reasonable, or do I feel impelled to verify my impression by reading again? Is any other answer possible? Have I ever been called upon to answer such a question? What answer did I make?"

The net result was, of course, fresh interest in the process of reading. Many observed their own mental activities in reading for the first time. These processes took on new dignity—were seen to be highly complex, involving far more than mere recognition of words. The work of the children had new meanings. Their behavior in reading had now hitherto unthought-of explanations. It became clear that learning to read means the formation of right mental habits, the conscious control of analysis and thinking. Using the current pedagogical gibberish, we might say that there was less teaching of books and more teaching of children.

One of the most tangible results was the ready consent on the part of almost all to the abandonment of that old reliable time-killer of the public school, reading aloud at sight in the lower grades. "Study first!" became the slogan. Even if the children do whisper or vocalize at first, at any rate they know that they are not reading aloud. If we persist, we shall accomplish three very desirable things, namely, set up in the pupils' minds the ideal of careful study, greatly increase their speed in silent reading, and enable them, when they read aloud, to read with fluency and to give the sense. And to a gratifying degree all of these things undoubtedly happened. A curious and persistent fallacy is, by the way, the belief that children must above all things learn to read aloud at sight by trying to do it long before their experience with language or with the difficult art of looking ahead when you are pronouncing from the page enables them to deal with the sentence as a *simultaneous* as well as a successive whole. Nobody would require the tiny tot at the piano to perform for visitors or for a recital audience in this fashion. Sight reading in piano lessons is a private performance for many moons. But because reading aloud at sight is a performance which, after a fashion, can go on, and because it is something to do in the "recitation," when perforce there must be continuous vocal utterance on the part of somebody, it does go on, as all who make a practice of visiting schools can testify. Only a better knowledge of the psychology of reading and of learning to read will stop it. Such seems to be the conclusion suggested by our attempts to apply Thorndike's "Reading as Reasoning."

BEFORE TAKING AND AFTER TAKING

That what is needed is a better conception of the job may be illustrated by the following pair of lessons, conducted by the same teacher, with the same grade of children, using the same book.

The topic of the first lesson was "Polly's Pranks," an excerpt from a well-known book on birds. A child was called upon to read the first paragraph aloud. He stumbled over the word "cyclone" in the sentence, "When Polly got through with the work-basket, it looked as though a cyclone had struck it." Dutifully the teacher set herself to the task of securing the pronunciation of the word. She divided it into syllables upon the blackboard. She set up phonetic analogies; "*Cy* is like *ci*," she explained. She called out a choral response from the class. Then she required the boy to read the passage again. That the passage *suggested* anything to the reader, to the audience, or even to the teacher, there was not the slightest evidence. The recitation appeared to be a linguistic exercise pure and simple; pronunciation the sole end in view.

After an interval of a few weeks, however, during which the teachers of this school discussed the principles of reading after the manner indicated above, this teacher conducted a lesson on "The Tongue-cut Sparrow." "What a strange idea!" said she. "Tongue-cut! How and why would a bird have its tongue cut?" The sally elicited several conjectures, among which was the cheerful suggestion that the bird made too much noise and had therefore suffered the loss of the end of its tongue.

Then the teacher offered her own experience. Her brothers on the farm had caught a young crow and had tamed it. In the harvest time they conceived the notion of teaching the bird how to speak. So they loosened the membrane under its tongue and induced it to say something that sounded like "Vote for Bryan! Vote for Bryan!" The children smiled at the quaint conceit, the significance of which they did not of course fully grasp, and turned to their books with avidity to discover, each for himself, the fate of the tongue-cut sparrow. And wonderful to tell, the teacher did not interrupt them while they were doing it. She let them get the whole story and then welcomed spontaneous remarks and discussion on the points involved, which she directed toward the clearing up of the children's impressions, making each certain as to what actually did happen, and thus sought to enable the reading to yield sound and true vicarious experience. Mechanical details were rapidly cleared up in the process of achieving this end.

LEARNING HOW THE PUPILS DO STUDY

The ideas about reading developed in conference, which began to work reform in the manner which has just been illustrated, were strengthened here and there by means of special study lessons in which the pupils tried out such methods as they knew and thus oriented the teacher as to their needs and her responsibility.

For example, a fourth-grade class was asked to study a selection from Thoreau called the "Battle of the Ants." Some finished in less than one-third of the time required by others. Individual differences were marked. In answer to the demand, "What did I say I would ask you when you had finished?" one boy rose and began at once to try to reproduce the thought of the first paragraph. Any other remark in a certain tone of voice would apparently have touched off the same response on the part of this youngster, who was evidently thoroughly habituated to a certain formal type of school exercise.

Others, however, were ready to answer the question which had actually been

agreed upon, namely, "Just what did you do when you studied the lesson?" "I tried to pick out the main points," said one. "I read the piece through and then tried to see how much of it I could remember," said another. "There were some things I knew I did not understand," said a third, and "I made up my mind that I would ask the teacher about them." The passage this pupil had in mind proved to be that in which Thoreau compares the struggles of the ants to those of the Greeks and Trojans around the walls of Troy. Another pupil said that he suspected there was a story about Troy and he meant to look through the books in the library in order, if possible, to find it.

A SHIFT OF EMPHASIS IN TEACHING

As was to be expected, the teachers who discovered that few of their pupils had knowledge of good methods of work began to give specific training in how to study. They showed the children how they themselves went about it. They set up different procedures and familiarized the pupils with the uses of each They sought to build up definite *ideals* of method and of efficiency, seeking all the while to discover and satisfy individual needs

Perhaps most noticeable was the shift of emphasis in their questioning. There was a tendency to get away from minute questions of fact, such as "What does it say in that passage?" and to ask instead questions requiring thought, as "Why did it happen? How do you know?" and the like. The questions, moreover, especially at the outset and near the conclusion of the study of a selection, tended to be more inclusive, to deal with the thing as a whole, to set up and check by reference to certain purposes for which the reading should be done. For instance, a group which had come to a good understanding of the story of Hawthorne's "Pine-Tree Shillings" was asked, "Do you like the mintmaster? Would you be glad to have him as a relative of yours? Why? If you wished to tell this story to the friends at home tonight, what main steps in the story would you have to recall?"

In answer to the last question the pupils of this sixth-grade class readily analyzed the story into the following steps: (1) situation, the colonists need a convenient form of currency; (2) pine-tree shillings are agreed on and Captain Hull is made mintmaster; (3) Captain Hull becomes very rich by putting away his commission, the twentieth shilling; (4) Captain Hull promises his daughter in marriage to Samuel Sewall; (5) at the wedding the captain surprises everybody by giving his daughter as her dowry her weight in pine-tree shillings

How these methods of study began to be applied to other subjects and how the questions of proper materials and of treatment appropriate to them came into focus and were disposed of, our next instalment will relate.

ONE PHASE OF THE TECHNIQUE OF THE PROJECT METHOD OF TEACHING

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A question frequently asked by teachers eager to aid in the development of the project method is, "How large should a project be?" Thereby hangs a tale.

This is one of the most pertinent, most vital, and perhaps most troublesome questions to be solved by the educator. Indeed, if trying to answer it offhand, one would say, "There can be no answer to this question. The project should be as large as it happens to be, as initiated by the child or the group of children. It must comprise as much as is necessary for its own maximal functioning as an educative medium."

Such an answer is simply evading the issue and cannot satisfy the lay teacher, for whom, after all, it is necessary to establish a sort of working basis for the immediate use of this developing concept of education. Since our normal schools are not always handling specifically the content and method of the elementary-school curriculum which the apprentice will have to deal with when she assumes the responsibility of her own schoolroom, she must often rely upon other instrumentalities for guidance and help. In other words, there is a decided conflict at present, in almost every locality, between the *what* and the *how* of the teacher's childhood and normal-school experience and the *what* and the *how* of her teaching in the rapidly approaching change of school practice which this newer concept of education is bound to bring with it. For this reason the question which opens this discussion must be answered. The answer has to do primarily with organization; next, with motives—"drives" toward a definite end; third, with the necessary planning and adjustment in order to attain the end set up—in order to perfect the project, so to speak.

Let us suppose, for purposes of discussion, that we accept the principle that the project should be as large as it happens to be when initiated by the child. What will happen, in a school of thirty or forty pupils, under the care of one teacher, with perhaps occasional help from special supervisors of music and art? Suppose Willie's project to be the building of an American fleet while John is engaged in constructing a delivery wagon, and Mary is making a new outfit for her doll while Jane has conceived the notion of baking some cookies for a coming entertainment. Would not the teacher have to be omniscient, omnipresent, and omnipotent to keep the school wheels moving at all, not to speak of using the project as a vehicle for teaching the tool subjects? It is the glowing descriptions of the working out of some one or other of such miscellaneous, detached projects as these, by a "project-inspired" teacher, who may have had the most favorable equipment and other conditions, which often dismays the teacher seeking to become "project-inspired."

Now, what are the handicaps under which the teacher inexperienced in project teaching labors when she puts her hand to the plow? Perhaps the greatest is her own lack of practical acquaintance with the world of doing—her habit, in these days of factory production and division of labor, of accepting things as they are. Moreover, when all is said and done in spite of the privilege that may be granted her of encour-

aging her children to carry out their detached, accidental projects, she must cover a certain amount of subject-matter as outlined in the course of study.

As to the first of these points, it never can become as easy and natural to teach by the project method as to follow the established modes, until the normal schools "suffer a sea-change" and send out their graduates with a knowledge of the world of things, a stock of experience in the world of doing, and the courage to gather further information as needed which comes from actual experience in developing projects.

As to the second, some plan must be formed to insure the transmission of the social inheritance and to prevent endless duplication and overlapping, without throttling the child's initiative and denying him free opportunity to find himself. Such factors as content, grading, sequence, organization, drill, development of skills, habits, attitudes, appreciations, and originality must be provided for in developing a technique for the project method.

To allow children to initiate their own projects, whether small or large, as oases in the desert of the required course of study, has some value. But a consideration of the child's immature interests and habits and of the variety of defects in home environment shows that our teaching can never become "100 per cent project" without the teacher's finger in the pie of initiative.

One of the great values of school life is that it makes the child one of a group, the group being at least as important as the individual. If this can be conceded, why not encourage individual projects, many of them absolutely child-suggested, as parts of a group project? If the children are sent to school in order that they may acquire the social inheritance under the guidance of a mature mind, why not allow the teacher to determine the use of a large, interesting unit of life as a group project for the grade? This may be done so tactfully, so deftly, that the children will adopt and develop the idea almost as spontaneously as if it were their own. And the general idea, once adopted, will give ample opportunity for purely self-suggested individual and small-group projects, indeed, will generate them so rapidly that the teacher has merely to guide to a wise choice among the rich suggestions of the children. Moreover, this predetermination of the phase of life to be studied in each grade will avoid the over-cultivation of some parts of the field of knowledge to the total neglect of others, and can be made to bring about that "review with interest" which is the essential of drill.

By using large units of life as basic projects, mass or class or group teaching is called for at frequent intervals in launching the successive phases of the unit project, while the minor projects which grow out of this phase, being knit together by their common origin and aim, are much more easily handled by a teacher with only one pair of hands than such a heterogeneous collection of projects as are named in the earlier part of this paper. Co-operation is spelled in large letters, unselfishness becomes of paramount importance, group censorship rather than teacher censorship becomes the disciplinary agency.

After an intelligent launching of the project, the children following more-or-less-unrecognized suggestion by the teacher, a natural unfolding follows and the teacher's pondering over ways and means to motivate becomes a thing of the past. Indeed the child is more likely to show and to increase initiative when it is a case of the

next step, and the next, and the next, than he is when the selection of projects is a hit-or-miss affair. As in life itself the doing of one thing suggests another and the doing of this opens the possibility of doing something else, so when we move a large life-project bodily into the schoolroom the sequence and organization of subject-matter, the need for discipline, and the need for drill largely take care of themselves.

Moreover, if a curriculum be built up of large life-projects significant to all, the same or very similar fundamental projects being found in the same grade throughout the city, we overcome one of the most serious objections that have been urged to the use of projects as anything more than mere relaxation or sugar-coatings in a city system, namely, that it would make the matter of promotion or transfer difficult, if not impossible.

So it would seem that not only will the developing project-technique be furthered by the building up of a curriculum consisting of long-range social projects arranged in such a way that each grade will build upon the preceding, but the teachers now in service will thereby be helped to master any of the difficulties involved in the change from the old to the new.

In the working out of such a scheme, we shall probably discover more, or perhaps different, school essentials for socialized living, and shall demand social measuring sticks or tests, in addition to those we now have for the more formal necessities of living, such as reading, writing, and arithmetic. May the day speedily dawn when we shall be able to diagnose the social ills of the school and apply the necessary remedial teaching as we now are learning to handle reading, spelling, and arithmetical ills!

PLANS FOR TEACHERS' MEETINGS

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I. Purpose:
Teachers' meetings are organized to provide a means whereby comparatively large groups of teachers may profit to the maximum through suggestions obtained by coming in contact with:

1. An intelligent discussion of teaching problems and the *emphases* of the county for the current year.
2. A wide range of classroom experience, gathered together through discussion of concrete types of activities.
3. Needed revisions.
4. Need for growth on the part of teachers.
5. Final outcomes of instruction.
6. The latest developments in the *field of method* and classroom technique—*vital issues of immediate interest.*
7. Bibliographies of current articles and recent publications—worthwhile material for professional reading.
8. Discussion of reprints or mimeographed material to direct attention to possible solutions of significant problems.
9. Samples or descriptions of valuable materials—exhibits of projects worked out by classes, etc., posted at the office of the super-

visors and discussed during meetings.

10. Demonstration lessons to illustrate effective methods of teaching.

II. Types of group meetings:

1. Intergrade meetings where specific classroom problems, related to two or three grades, are discussed in detail; the plans outlined later in this paper showing the type of procedure.
2. Meetings of special groups of teachers to discuss common problems. For example, a meeting of eighteen teachers of Grades IV and V was held at the supervisor's office to discuss the difficulties of teaching industrial arts. As these teachers had no previous experience in teaching the subject-matter or the making of the projects, the supervisor gave specific help in working out the directions upon the actual projects desired, as the weaving of a bag or the making of a book.
3. Special meetings at individual schools where a problem of significance to that school is discussed. A meeting of this type was conducted at each of several large schools last year. The teachers of the school met the primary supervisor and me to discuss the results of the October Survey in Reading and Arithmetic, securing information regarding the graphing of the results for each grade and also for the school. Suggestions for informal tests and remedial work were given. Through these meetings developed the realization by each teacher of the relation of the work of her grade to that of the other grades throughout the school.
4. Meetings of supervisors in charge of special subjects, as music and drawing.
5. Committee meetings where constructive work on some problem is outlined. An example of this type of meeting would be that of the committee on history texts. This committee met three times for conference with the supervisor, finally submitting a report at the regular grade meetings in April.
6. Demonstration meetings, held in certain schools, the classroom teacher planning the day's work in close co-operation with the supervisor, to meet the specific needs of the visiting teachers.
7. General meetings in which a specific class problem is discussed.

III. How to conduct meetings:

1. Meetings should be conducted upon a democratic basis because the teachers then have a vital interest and feel that they are contributing to the common good of the school system. We should apply the same principles of good teaching here that we wish the teachers to put into practice. The meetings might well be similar to round-table discussions, with a maximum of teacher participation, guided always by careful, clear thinking on the part of the supervisor.
2. Programs for teachers' meetings should be drafted in such terms as to be a means of informing the

public and the authorities regarding the work of the supervisor and teachers. Since our work next year will follow up the work of Mr. Clark and Mr. Calkins at the Institute, our *objectives* might reasonably be: (*a*) problem-solving in arithmetic and geography; (*b*) increased ability in writing and spelling (because of felt need).

3. With these points in mind, the following tentative suggestions are presented for use in the programs of the meetings which I hope to conduct during November and January of the current year.

a) Geography:

(1) List five points which you consider important in the teaching of geography by the project method, emphasizing the fundamental idea of purpose. You will receive for discussion at the next meeting the tabulated summary of your suggestions.

(*a*) Discussion of mimeographed material called "Geography Project" by M. L. Warren (adapted from article in *The Journalof Educational Method*, September, 1921).

(*b*) By what standards should the results of the project method be judged and what tests should be employed? Give specific instance from your own experience to show that more learning took place in a definite period when work was based upon the fundamental principles underlying the project method.

(2) As a result of the work with concrete problems in regional geography, given by Mr. Calkins at the Institute, how have you stimulated and assisted your pupils in careful analysis and quick, original, clear thinking with regard to reflective problem-solving?

(*a*) What means have you used to get pupils to (i) define the problem clearly; (ii) keep the problem in mind; (iii) make many suggestions; (iv) evaluate each suggestion carefully; (v) organize the material.

(3) Economical and effective study habits.

(*a*) The relation of supervised study and the socialized recitation to the project method of teaching: (i) discussion of how pupils may be guided to discover problems for study and investigation in connection with a content subject like geography; (ii) review mimeographed suggestions received at last meet-

ing, "Necessity for Setting Up Thoroughgoing Technique in Study Lessons in History." Draft a similar set of suggestions for geography.

(4) What type of a plan book might the teacher keep for project work? Illustrate from geography.

b) Arithmetic:

(1) How has your use of the Thorndike *Arithmetic Texts* been influenced by the suggestions given by Mr. Clark? Please review the inclosed summary of Mr. Clark's work at our recent Institute. Bring this summary to the meeting for discussion.

(2) Be prepared to discuss the bearing of the following factors upon the question of problem-solving in arithmetic. Give concrete instances to illustrate your points.

(*a*) The origin of thinking is in the pupil's own experience of some difficulty that troubles him. (He must know what the question is.)

(*b*) Consideration, from the pupil's own past experiences, of some plan that will solve the problem. (Must know what facts you are to use to answer it.)

(*c*) Suspended judgment until the plan is carefully examined and criticized. (Must use facts in right relations.)

(3) Thorndike says: "We should find an abundance of problems which will exercise the intellectual powers well and at the same time prepare the pupils more fully and directly to apply arithmetic to the problems they will really encounter in life."

(*a*) Draw up a set of standards by which problems might be judged. Do this in a number of clear-cut principles (not less than six), each principle followed by a few sentences to make illustration concrete. These standards will be collected at the meeting.

(4) Mention instances in your teaching which show that remedial work to meet individual differences has resulted in any of the advantages following:

(*a*) Saves time of pupil.

(*b*) Is more efficient.

(*c*) Provides plenty of work for pupils.

(*d*) Children have more incentive to progress.

(*e*) Does away with discipline problem.

(*f*) Gives bright children

increased opportunities.

(*g*) Gives dull children increased opportunities.

(*h*) Children feel responsibility.

(*i*) Parents realize responsibility rests upon pupils.

(*j*) Makes children work harder.

(*k*) Excellent for drill work.

(*l*) Accomplishment of children shows that it pays.

(5) Questions about the details of learning in arithmetic, the probable answers of which we should be considering:

(*a*) What constitutes sufficient practice for the necessary skills?

(*b*) What is the most desirable length of review periods?

(*c*) How much practice at the time of initial teaching should a new topic receive?

(*d*) What specific skills, information, and knowledge of principles do children possess when they come to the seventh grade?

(*e*) Is there a definite relation between speed and accuracy in computation? Does increasing either increase the other?

(*f*) What activities have you used to teach the facts and processes, avoiding the development of the "tool" without sufficient teaching of its use?

(*g*) What definite objectives should be set up for pupils and teachers, in terms of specific abilities, to be acquired in relation to actual human needs?

c) Penmanship:

(1) Come prepared to discuss penmanship in regard to:

(*a*) Essential points to be emphasized in developing ability to write.

(*b*) Length of writing periods from standpoint of hygiene and efficiency.

(*c*) Use of definitely established scales and standards toward which to work.

(*d*) Frequent testing.

(*e*) Special help from teacher to meet the varying capacities of children. (Provision for individual differences by group teaching and individual instruction.)

(2) Analyze the important elements that enter into writing in terms of such outcomes as habits, skills, knowledges, attitudes (interests and ideals).

(*a*) If *progress lies in abilities acquired*, how may this analysis help in the follow-up or remedial work with which you are planning to remedy the situation for those pupils who are below standard in speed and quality?

d) Spelling:

(1) Read carefully, in the course of study, the suggestions for teaching spelling in the grammar grades, pp. 150–57. What additional recommendations would you make regarding the best method of helping the pupil to secure a "spelling consciousness," making for accurate spelling ability?

(2) These recommendations will be given to a committee on spelling. The members of this committee will use your recommendations to plan definite methods of teaching spelling. The following topics are suggestive:

(*a*) Sources of words to be taught.

(*b*) Use made by pupils and teacher of spelling-text for the grade.

(*c*) Economical ways of learning and teaching spelling.

(*d*) Number of words taught in one lesson.

(*e*) Type of spelling lessons: teaching lessons, testing lessons, column vs. dictation procedure.

(*f*) Plan of review: Value of using for testing such a scale as Ayres' "Measuring Scale for Ability in Spelling."

(*g*) How the dictionary should function.

(*h*) Incentives for arousing pupils' interest in spelling.

BIBLIOGRAPHY FOR "TEACHERS' MEETINGS"

Books that would help teachers:

THORNDIKE, *New Methods in Arithmetic.*

This book will be used by our teachers as a basis for constructive work as related to the new tendencies in organization in arithmetic.

Sixteenth Yearbook.

This gives G. M. WILSON, "A Survey of the Social and Business Uses of Arithmetic," pp. 128–42; F. N. FREEMAN, "Handwriting," pp. 60–72; H. C. PRYOR, "A Suggested Minimum Spelling List," pp. 73–84.

WILSON and HOKE, *How to Measure.*

The best and most helpful book that our elementary school teachers would use. It gives much material upon pupil diagnosis—ability and difficulties. See analysis of aims of geography teaching, pp. 205–7.

COURTIS, *Standard Practice Tests in Handwriting—Manuals.*

A desk copy of the pupils' manual would prove helpful to the teacher, as it gives specific suggestions for classroom procedures. The teachers' manual is also valuable.

TIDYMAN, *The Teaching of Spelling*

Definite recommendations for securing better teaching of spelling.

HORN-ASHBAUGH, *Spelling Book*, Grades I—VIII.

A carefully compiled list of words, with good suggestions in the general directions to teachers

and pupils. The procedure, adapted from these suggestions, is being "tried out" in Baltimore County.

STARCH-MIRICK, *Study Speller*.

Another good list of words, with helpful suggestions that might be used to supplement procedures followed.

O'BRIEN, *Silent Reading*.

Our teachers will find this particularly helpful in following up the intensive work in silent reading stressed last year.

Eighteenth Yearbook, Part II.

This gives HORN's "Principles of Method in Spelling" and MONROE's "Principles in Arithmetic."

BONSER, *Elementary School Curriculum*.

Contains many practical suggestions for the teacher.

STUDENT REACTIONS TO THE PROJECT METHOD[1]

For the past two years we have been conducting experiments with the project method in the subject of history at the Horace Mann School for Girls, Teachers College, Columbia University. The special fields selected for this experimentation were Modern European History in our ninth year and Contemporary Social Problems in the tenth year of our senior high school.

As a teacher of history and civics for many years I have come to feel that neither of these subjects is doing for our young citizens what the Committee of Seven said they should do. That report, issued in 1899, has come to be looked upon by many of us as the Old Testament of the history teacher. It contained much that was and still is excellent. For instance under the caption "Training for Citizenship" we note the following as objectives in history: "the power to gather information"; "training in the handling of books"; "an understanding of the relation between cause and effect"; "the scientific habit of thought"; "the cultivation of resources within themselves"; "and so to develop historical-mindedness as to materially influence the character and habits of the pupil."

Now the thoughtful teacher of experience knows that these objectives, splendid in themselves in training citizens—not embryo historians—are seldom realized from the study of history as it is generally taught in our schools today. It was, therefore, the main purpose of our experimentation with the project to see what could be done to realize these citizenship objectives.

We took our general method from John Dewey. "The true starting-point of history is always some present-day situation." This meant, of course, the abandonment at the start of chronological order and the covering of our field by the selection of class projects.

In modern European history we have used such projects as: (1) The progress of labor and how it affects us today (the Industrial Revolution). (2) The Irish Question: causes and possible solutions. (3) How did France become a permanent republic? (4) Why is Japan one of the leading nations of the world and what have been her relations with the United States? (5) How did constitutional government come to England? In Contemporary Social Problems we have discussed and worked out such typical projects as: (1) How do we elect a president of the United States? (2) What are the possible solutions of the negro problem? (3) The past, present, and future of the prohibition movement. (We closed this project with a formal debate on, "Should the eighteenth amendment be repealed?" (4) What has been the effect of immigration on the United States and what should our present-day policy be toward the immigrant? (A Naturalization Court was staged by the class in the auditorium.)

Both of these classes were organized in a democratic manner with chairman, secretary, and activities committees, determined by our

[1]Part of the facts in this article have appeared in the Teachers College Record and are reprinted by permission

needs. It is "our" class; the responsibility is divided, the teacher is "not dethroned"; and we do not spell "socialized" with capital letters. Civic notebooks are kept by each student; a special shelf is reserved for us in the school library for reference books; a clipping bureau has been established; and one day of the week is given over for current events, a prolific source of future projects. Each project is organized roughly as we progress, and then put in final form as the "Irreducible Minimum." So much for the purpose, method, and general machinery.[1]

During the past term these groups have been observed regularly by my Teachers College class of mature students, composed for the great part of teachers of some experience and training in history. And it is the object of this paper to record the reactions of this group of college observers and also the reaction of the pupils of the classes themselves.

I asked both of these groups to give careful thought to this question: "What do you consider to be the good and the bad features of the project method?" The answers in all cases but one were handed in without any name attached. From the replies I have listed the following, avoiding unnecessary repetitions, but giving in their own words the pupils' conclusions for and against the project method as I have interpreted it in my teaching procedure with them.

I will first give the answers of the Horace Mann pupils. In nearly every instance there was a majority vote of the class favoring the statement as given.

Good Features:

1. We have overcome the difficulty of getting enough references by going to many different sources for enough material so that everyone may be prepared each day.

2. We learn how to organize materials for ourselves and do not have everything prepared for us by the teacher.

3. We do our arguing and discussing on the basis of "light not heat," and are becoming more broadminded.

4. We gain more lasting information because we have rooted it out for ourselves.

5. It trains us logically—to think clearly and to get our ideas over to the class.

6. The girls have attained an independent attitude of studying and we are getting along much faster.

7. Our discussions are usually the most helpful part of our lessons.

8. Getting and putting things together from the library has helped us a very great deal, not only in history but in everything.

9. Our interest in current literature has been stimulated.

10. We learn how to do things, how to work out our own problems.

11. We learn to thrash out questions for ourselves, instead of relying on textbooks.

12. The girls are more interested and will work harder. They will remember what they learn because they choose the subject and build it up themselves.

Bad Features:

1. We are not yet able to curb unnecessary discussion.

2. We talk too much about "the project method" and what we are going to do next.

3. The home-work assignments are indefinite, although we are improving in this respect.

4. Too much time is spent on one project.

5. It is hard to get references that bear directly on the point of discussion.

6. There is a tendency to wander off the track when becoming interested in something else.

7. We do not do our home work regularly.

8. Too much of the work is carried by a few pupils.

9. The girls who do not do outside reading can get away with it without anyone noticing it.

10. Too much time was spent on the negro problem, but that difficulty has been successfully met in our last project, on prohibition; but the matter still can be improved.

11. We could not go to college on the project method because we never can limit ourselves to

[1] The method of setting the projects, the materials used, pupil charts and summaries, as well as typical answers to test questions are given in fuller detail in the November, 1920, issue of the *Teachers College Record*, Columbia University.

any length of time, therefore we could not cover enough ground. (Class about equally divided in its opinion on this last statement.)

From the answers handed in to me by my observers from Teachers College, who have followed the work daily from the beginning of the spring term, the following expressions were compiled. In order to get a general response, both pro and con, I asked the group of regular observers to vote on each statement and have appended their answers, giving the "Yes" vote first in each instance.

Advantages:

1. Tolerance of the opinions of others, open-mindedness, and good will. (7–0)

2. Self-reliance, i.e., ability to go and gather useful information. (7–0)

3. The beginning of a scientific and critical attitude toward material. (7–0)

4. General orderliness: (very good [4]; good [3]. Discipline shifted from teacher to group itself: self-government.

5. A get-together spirit and ability to co-operate. This is a remarkable feature. (7–0)

6. Good followship and good leadership. (7–0)

7. Acquiring the power to participate in worthwhile constructive discussion. (7–0)

8. An aroused and increased interest. (7–0)

9. Wholehearted activity stimulated in pursuit of knowledge. (6–1)

10. Remarkable facility in using parliamentary procedure as an instrument in conducting class affairs. (7–0)

11. The teacher is "not dethroned." Is in center of the group as adviser and guide instead of dictator. (7–0)

12. Responsibility for the conduct of the work felt to rest on both teacher and pupils. (7–0)

13. Life situations approximated. (6–1)

Disadvantages:

1. Loss of time in ground covered due to parliamentary discussion. The latter, however, felt to be distinctly worth while; a question of relative values. (7–1)

2. Loss of time due to needless discussion, but the class is conscious of this fault and is trying to overcome it. (8–0)

3. A lack of continuous and severe mental work. (3–4)

4. The slower student seems to demand more definiteness in the daily assignments. (7–1)

5. Getting beyond the depths of the pupils so that they talk about things without clearly understanding them. (2–6)

6. Certain required subject-matter slighted. (1–7)

7. Non-participation on part of some members of the class is greater by this method. (3–5)

8 Encourages the expression of opinion not founded on sufficient knowledge. (3–6)

These replies furnish the evidence as to the success and failure of our particular application of the project method. I have purposely arranged these lists so that the dangers and difficulties not successfully overcome should stand last, and consequently leave the stronger impression. For to every one of us who believe in the project method here lies the challenge and here our opportunity.

R. W. HATCH

HORACE MANN SCHOOL
TEACHERS COLLEGE

THE CLEARING HOUSE

AN AMERICAN LEGION REUNION

I. Reminiscences of France given, pictures and souvenirs shown, also entertainment enjoyed. Children as soldiers and Red Cross workers returned from France.

II. Teacher's Aim:

A. Ultimate.

1. To learn and appreciate the great things the French have contributed to civilization.
2. To appreciate interdependence of France and United States.
3. To interest the children in French history to the extent that they continue their reading outside of school—Napoleon, Joan of Arc, *Tale of Two Cities*, Lafayette.
4. To cultivate the reading and study habit.
5. To appreciate problems which confronted the government and to create respect for the government.

B. Immediate.

1. To give rational knowledge of France.
2. To show the effect of natural surroundings (climate, soil, minerals, and location) on development.
3. To create an atmosphere of "France" in the room while studying France.
4. To raise problems which will be solved by children—for example, "Why do the French drink so very much wine?"

III. Material:

A. Books: Tarr and McMurry, Book II; Atwood, *New Geography*, Book II; Carpenter, *Europe;* Carpenter, *How the World is Clothed;* Smith, *Commerce and Industry;* Cressy, *The Story of Food;* Monroe-Buckbee, *Europe and Its People;* Allen, *Europe;* Chamberlain, *How We Are Clothed;* Williams, *Paris;* Marian M. George, *Little Journeys to France and Switzerland; National Geographic Magazine;* Bradley, *Touring Europe in an Automobile; "Biographies of Great Artists," Bonheur; Great Buildings of the World; Children's Classics in Dramatic Form, Book V; "History of Napoleon";* Dickens, *Tale of Two Cities; History of Lafayette;* Canfield, *Home Fires in France; Notes from a French Village*, pp. 1–26; *La Pharmacienne*, pp. 259–61; "Jean Valjean" (dramatized), *Dramatic Reader, Book V; Book of Knowledge.*

B. Pictures: Rosa Bonheur, Millet, Corot, and Pictures from *National Geographic Magazine.*

C. Maps.

D. Newspaper clippings.

E. Victor record, "The Marseillaise."

F. Songs: "The Marseillaise"; "Somewhere in France Is a Lily"; "Joan of Arc"; "Long, Long Trail."

IV. Procedure:

A. *Raising of Project*—A boy brought a shell which his brother had picked up from a battle field in France. The children were intensely interested in the shell and in what the boy told of the things his brother saw in France. Other children were eager to bring souvenirs which they had at home and to tell of the things their friends and relatives had seen in France. In consequence it was decided to pretend they were their brothers and friends and to have a reunion of all the returned soldiers—to tell of the interesting

things they saw in France (it was decided to say very little about war scenes), to show the things brought back, and to prepare some entertainment for the day.

B. *Exploration.*—Problems.

1. How did the soldiers get to France?
   - *a.* Ports from which they sailed in United States.
   - *b.* Ports in Europe at which they landed.
   - *c.* Drill in proper pronunciation of names of French ports.
2. What soldiers of the French Republic were seen fighting who did not come from France? Map study of French possessions, descriptions of French from Algeria, Tunis, Morocco, Sudan, Sahara, and other French possessions. Use of block outline map, showing French possessions over the world.

   What other possessions could have sent soldiers? Corsica, Madagascar, French Guiana, St. Pierre Miquelon, Somaliland, French Indo-China. What products did these islands send to help the French soldiers?
3. Many of the soldiers did not get to see Paris. What impressions were received by the ones who were fortunate?

   Paris as seen by the soldiers:
   - *a.* Beautiful parks and boulevards.
   - *b.* Louvre.
   - *c.* The tomb of Napoleon. Study "History of Napoleon."
   - *d.* Versailles.
   - *e.* Eiffel Tower.
   - *f.* Notre Dame.
   - *g.* Suburbs—Malmaison, Fontainebleau.
   - *h.* Shops.
   - *i.* Royal Opera House.
   - *j.* Jeanne d'Arc as seen in front of Pantheon.
   - *k.* Champs Êlyssées.
4. Why did the French peasants have so much money at the beginning of the war?
   - *a.* Thrift of the French peasants.
   - *b.* School savings banks in France. Problems in arithmetic.—Ex.: A French boy attends school eight years in the grades. He saves 18 francs (using 19 cents as a franc). Each succeeding year he saves one more, 19 francs the second, 20 the third, etc. By the time he is through, how much would he have in our money?

     How could he have more than that? (By the bank paying interest). Study of interest as presented in Thorndike. Each child is given a blank check, is taught how to make out a check, writes a check for $100 which he places with the "Woodland Bank." He figures interest simple and compound on his $100. Thorndike problems and those made by the class solved. Problems in changing soldiers' money to French.
5. Why was the water in France tested before the soldiers used it for drinking? Study of impure water, germs, value of boiling water before drinking. Is the same result found from freezing the water? Kansas City water. Ozark project as contemplated.
6. Why did the soldiers see so much wine-drinking in France? Study of sanitary conditions; sewerage in rural France; reasons for im-

pure water. Why did the foreign population in the United States object to prohibition?

Study of grape-raising and wine-manufacturing as an industry. People employed in manufacturing, amount made, consumption, etc. The Eighteenth Amendment.

7. Some of our soldiers saw the king of England. How many saw the king of France? Picture of new President Millerand shown. Tricolor made and hung with the Stars and Stripes. Current events about new cabinet, length of office of president of France, Élysées Palace, residence, Premier Aristide Briand. Ex-premier's trip to Africa. History of France —monarchy to republic. Louis XIV, XVI, Napoleon, characters of interest in France. General Joffre. Jean d'Arc. Historical events.
8. How do battle fields now appear? Battle fields marked out on map. Pictures shown of them as they are to day. Reconstruction in France; new territory added. Clearing fields of shells; danger from unexploded shells, etc.
9. What difference did our soldiers see in the methods of transportation in France and at home? Trains, boats, trucks, etc. Why did they see *small* freight cars and engines?
10. What did the soldiers see in rural France which amused them? Experiences of American Red Cross workers, as given by Dorothy Canfield Fisher in *Home Fires in France.*
11. Why do some of the soldiers have an "A" on their sleeves? (Army of Occupation). Where did they occupy Germany? Where did the Germans enter France? Was it easier to enter from that direction than from any other? Study of frontier of Belgium, northeastern France, and of southwestern France. How has the location of France helped its people to be a wonderful nation?
12. Why did the boys bring so very many silk aprons, silk handkerchiefs, silk patterns, and other articles of silk from France? Study of silk industry as learned by some of the soldiers who visited Lyons and St. Êtienne.
13. What were some of the copies of masterpieces brought by Americans? (Show pictures.) What have the French contributed to art?
    a. Love and appreciation of art. Love for the beautiful. Cultivation of art instinct in children. (Educating talented children at expense of government.)
    b. Pictures of Corot, Bonheur, Millet, Lebrun.
    c. Study of artists, important pictures shown and told about to class. Feature stories written for Room 2 *Monitor* about certain pictures.
    d. Game: Who can find the most pictures by French artists in Woodland Building?
    e. Tribute paid to Miss Buchanan for valuable collection of pictures; letters written to her.
    f. Louvre—gems of the Louvre.
    g. Visit, after study, to city art gallery.
14. Why were many of the convalescent soldiers sent to southern

France? Climatic conditions in southern France. Climatic conditions in southern France as compared with northern France. Where were some of the convalescent camps?

What soldiers from the United States found a climate in northern France similar to that they were accustomed to in the United States? What conditions did they find?

15. Why have the Germans looked longingly at the French territory along the Belgian border? What trouble has already been caused by this situation? History of the acquisition of Alsace-Lorraine. What did the intelligent soldiers expect to find when they found coal deposits? Is this true in France?

16. What was being done in the square beds into which the flats off the coast of Brittany have been divided? Study of oyster industry.

17. In visiting with the *poilu*, at what occupation did they find most of them had been engaged? What do they raise on their farms? (Wheat, flax, sugar beets, etc.) What did the doughboys think of their farming methods? Pictures of old implements, also of modern tractors and implements used in reconstruction.

18. From what place does some of the best china in the world come? Why? Study of manufacturing of china in Limoges. What material is required for the manufacturing of china? Do we have such material in Kansas City? Why?

19. Where in France did the boys find the opportunity for mountain-climbing? Study of the Alpine district, Mont Blanc. What did they see the people doing there? Show pictures.

20. One soldier went the length and breadth of France by boat. How did he do it? Study of rivers and canals used in transporting food and ammunition. What is the "missing link" in France?

21. What newspaper did the boys enjoy most while with the A. E. F.? (Two pages of *Woodland Monitor* devoted to feature stories.) Some of the stories are feature stories written about French peasant life—stories taken from French artists' pictures. All write stories, the best in penmanship and theme written on paper. Copies of "The Stars and Stripes" brought and read.

22. What were some of the French words used by soldiers at reunion? *Bon jour, vive la France, pardon, parlez vous, bon ami, merci, madame, monsieur, mademoiselle, s'il vous plaît, adieu.*

23. Why did so very many soldiers return to America in such splendid physical condition? Study of foods, exercise, diet, etc.

24. How to entertain soldiers after they have had a good time visiting about France. Sketches—Jeanne d'Arc, Jean Valjean, *The Diamond Necklace*; songs.

C. *Plans and drills in preparation.*—The problems are made out by teacher (some suggested by children, some worked out by the whole group). Some are given to individuals to work out, and some to small groups. Some are worked out before the reunion,

others prepared to give the day of the reunion. Friday, two weeks from the day the project began, is selected for the day of reunion. All work is directed toward that aim. Much drill is found necessary for the success of the "reunion."

1. Sentence forms, use of complete sentences, subject, predicate, number, etc. Drill on verbs.
2. Elimination of "baby blunders."
3. Use of adjectives in describing things seen in France.
4. Because of use of such sentences as "He fought *noble*," it was found necessary to learn use of adverbs. (Study from language books).
5. Attempt to enlarge vocabulary, use in conversation of "isolated," etc.
6. Drill in spelling.
7. Drill in penmanship, to be able to write letters and articles for school paper.
8. Songs: "La Marseillaise," "Star-spangled Banner" (alto and soprano), "America" (learned by all), "Somewhere in France," "Joan of Arc" (by groups). Groups selected to prepare and give sketches from "Jeanne d'Arc," "Jean Valjean," and *The Diamond Necklace*. "Jeanne d'Arc" is read in class and characters impersonated, tried out, and selected. The other two are prepared at home by groups; best scenes selected for "reunion."

The Reunion.—Room is decorated with red, white, and blue. Stars and Stripes with Tricolor displayed. Posters, cartoons, and border depicting French scenes are placed around room.

1. At 9:45 soldiers (Room 2, 47 strong) gather, greeting each other with French words; Boy Scout suits or Red Cross aprons worn by many children.
2. Soldiers tell in what division they were, where they landed, and show in what drives they saw action.
3. "America" sung, flag salute given.
4. One group tells of all the soldiers from the French Republic that they saw. They tell of the use of camels. They show on block outline map the routes used in coming to France.
5. Soldiers who visited Paris show pictures and describe beauties of Paris.
6. One *poilu* tells of his government —president, premier, and cabinet. His sister tells of the present conditions in her country.
7. A group of Red Cross Hut workers tell of rural France. Information from Dorothy Canfield Fisher's *Home Fires in France*. A nurse recently returned shows pictures and tells of the battlefields as they are today. A tourist who visited France before the war describes the beauties of France before the war. She shows pictures (taken from *National Geographic Magazine*).
8. Souvenirs are exhibited on large table. The children tell what they are, where they were found, and experiences with French country people. They describe implements used for farming; also show pictures of tractors being used there now.
9. A group show the silk *souvenirs de France* and tell of the silk industry in France as they saw it.

10. Greatest pictures of French artists shown.
11. Boys tell of experiences and what they learned of oyster industry in Brittany.
12. Dramatizations given.
13. Paper read.
14. "La Marseillaise" played on victrola, then sung by children.
15. Original dramatizations given representing things seen in France.
16. Four boys tell of a motor trip through France.
17. Some girls show perfume and soap which they brought back, and they tell how it is made.
18. A Frenchman explains why in his country they drink so much wine.
19. Songs by groups: "Somewhere in France Is a Lily," "Joan of Arc," and "Long, Long Trail"; "Star-spangled Banner."

ROXANA M. ADAMS.

TEACHERS' TRAINING SCHOOL,
KANSAS CITY, MO.

AS REPORTED

THE N. E. A. AS A REPRESENTATIVE ASSEMBLY

All reports seem to indicate that the reorganization of the National Education Association has proved effective. At the Des Moines Meeting there was a new sense of individual responsibility. Many attended the meeting as appointed delegates representing local bodies, and their presence took on a new dignity in consequence. The business of the Association proceeded smoothly and with no evidence of the factional differences which threatened to destroy the society's usefulness.

One serious difficulty remaining is to find a time of meeting when all can attend who might wish to do so. As it is, the summer sessions of the normal schools and colleges detain a very large number who would enjoy participation in the meeting and who would have much to give. Among other suggestions, that of holding the annual convention late in August has been made. This would have advantages, but it would find many leaders already at their desks preparing for the year's work. Why not choose a time, say the Christmas holidays, when a large number of affiliated societies could join and thus make the meeting in a large way an educational clearing-house?

The next annual meeting will be held in Boston in July, 1922.

THE PROGRAM OF THE NATIONAL COUNCIL OF PRIMARY EDUCATION

The National Council of Primary Education was organized in 1915 through a rather spontaneous assembling of primary and kindergarten leaders. It was agreed to work toward a three-fold goal, a greater use of activities in the primary school, greater freedom of method for the teacher, and closer co-operation with the kindergarten and the grades above.

The first of these purposes has led to a study of the extent to which activities are being used in early education, the form which these activities take, and the extent to which children are permitted to initiate activities. The culmination of this study has been the publication of the report of an investigation led by Miss Annie E. Moore, of Teachers' College, under the title, "What Constitutes an Acceptable Day's Work in the Primary Schools?" In this report the question is raised and data, consisting of observations in many types of schools, are given, but the answer is left open for further discussion. This report has been spread broadcast over the country and is

stimulating widespread interest. The observations consist of detailed accounts of the day's work in both very formal and very free types of programs and is therefore full of suggestion to classroom teachers and supervisors.

In seeking the second purpose, it is realized that freedom of method must depend in large measure upon the kind and extent of the teacher's professional training. With a view to raising the standard of professional interest and in line with our stand for self-initiated activities, informal local groups of teachers have been organized for the sake of the happy influence of greater social contact and for intimate discussion of immediate professional problems. These gatherings, being voluntary, avoid the perfunctory tone so often present in grade and association meetings and allow the opportunity for digestion and assimilation of the lectures and discussions of more formal gatherings. In general these social gatherings tend to dignify the field of primary education and impress the public with its importance and, incidentally, also to overcome the somewhat general impression that anybody can teach primary work and that those who know enough are soon promoted to higher grades.

The third goal is being reached through the social commingling of kindergarten and primary teachers and a mutual exchange of ideas. The Council's influence has undoubtedly been a factor in the increasing demand for movable furniture and other equipment which permits the greater use of activities and bridges the gaps which heretofore existed between kindergarten and first grade. A list of minimum essentials in primary furnishings may be found in the *Fourth Council Report*.

So far the studies undertaken have been centered in the first grade, since conditions there are fundamental, but the findings are full of suggestion for all early education. Other studies are in progress which will in due time broaden in scope. The Council's work will not be complete until, through a general awakening of interest in the general public and among the entire teaching corps, the best practice of the best schools becomes the common practice of all schools.

ELLA VICTORIA DOBBS,
Chairman, National Council of Primary Education.

UNIVERSITY OF MISSOURI

LIBRARIES IN EDUCATION

The following statement of principles is urged for adoption by the National Education Association and other educational societies:

1. All pupils in both elementary and secondary schools should have ready access to books to the end that they may be trained (*a*) to love to read that which is worth while; (*b*) to supplement their school studies by the use of books other than textbooks; (*c*) to use reference books easily and effectively; (*d*) to use intelligently both the school library and the public library.

2. Every secondary school should have a trained librarian, and every elementary school should have trained library service.

3. Trained librarians should have the same status as teachers or heads of departments of equal training and experience.

4. Every school that provides training for teachers should require a course in the use of books and libraries, and a course on the best literature for children.

5. Every state should provide for the supervision of school libraries and for the certification of school librarians.

6. The public library should be recognized as a necessary part of public instruction, and should be as liberally supported by tax as are the public schools, and for the same reasons.

7. The school system that does not make liberal provision for training in the use of

libraries fails to do its full duty in the way of revealing to all future citizens the opportunity to know and to use the resources of the public library as a means of education.

Committee: J. I. Wyer, director of New York State Library, *chairman;* Walter Brown, librarian of Buffalo Public Library; Annie S. Cutter, Public Library, Cleveland, Ohio; Lucile F. Fargo, librarian of North Central High School, Spokane, Washington; H. A. Hollister, high-school visitor, University of Illinois; Florence M. Hopkins, librarian, Central High School, Detroit, Michigan; Willis H. Kerr, librarian, State Normal School, Emporia, Kansas; C. G. Leland, superintendent of libraries, Department of Education, New York City; O. S. Rice, supervisor of school libraries for the state of Wisconsin; Mary C. Richardson, librarian, State Normal School, Geneseo, New York; Alice Tyler, Library School, Western Reserve University, Cleveland, Ohio; Harriet A. Wood, supervisor of schools and public libraries for the state of Minnesota; Adeline E. Zachert, director of school libraries for the state of Pennsylvania.

THE READER'S GUIDE

SIGNIFICANT ARTICLES

A SYMPOSIUM ON THE PROJECT METHOD

One of the most important of the recent articles dealing with method is the symposium in the September number of the *Teachers' College Record.* This is made up of contributions from five persons, Professors Kilpatrick, Bagler, Bonser, Hosic, and Mr. Hatch of Teachers' College, and embodies the main points of a discussion carried on at the annual meeting of the Elementary Section of the Alumni Association of Teachers' College. The general topic was "Dangers and Difficulties of the Project Method." Among the dangers feared by Professor Bagley were less permanent retention, less actual transfer, weakened respect for race experience, lack of provision for organization of knowledge, underestimate of the need and value of control and guidance of children, and lack of perspective. He believed, however, that these dangers would ultimately be realized and overcome. Professor Bonser emphasized the dangers of misinterpretation and neglect. The idea may be taken in too narrow a sense, or children's passing interests may be overvalued, to the neglect of the race inheritance. To avoid these and other dangers, an adequate scholarship must be brought to bear. Professor Hosic contended that much that is desirable in education can come only through projects. We must simply be true to the principles of democracy and of the newer educational psychology. Mr. Hatch gave an account of the reactions of pupils in the Horace Mann School to the project method and also of a class of observers from the college. Professor Kilpatrick defined project as a unit of purposeful experience and described each of four types. He found great value in the project as a means of bringing children and the race experience together. It provides for much broader outcomes of learning than more formal methods. Most of the objections urged against project-teaching seem to spring from misconceptions as to what is meant by it. There is no intention, for example, of simply turning children loose to follow their bent. Drill may properly be included, as well as most other forms of useful learning. The task before us is to work out an adequate technique, upon which a good beginning has already been made. Indeed, the whole outlook for a sound development is most favorable.

MOVEMENT IN HANDWRITING

How scientific studies may bear upon current school practices is well illustrated in the *Journal of Educational Psychology* for May. Reporting recent investigations made by means of a special camera, Professor Frank N. Freeman contends that the attempt to teach the so-called muscular movement, especially in the lower grades, is a "flat failure." There is comparatively little correspondence between the degree of arm movement and the degree of excellence attained. He shows also that less importance is to be attached than is commonly done to a level wrist and other phases of orthodox position. In a brief summary he sets forth the conclusions which his investigations seem to warrant with regard to position, to movement, and to speed changes. In general these are opposed, not so much to current practices, as to laying undue stress on position and movement and expecting too much regularity in speed.

PROFESSIONALIZING THE PRINCIPALSHIP

There is evidence to show that the office of principal of an elementary school is growing in dignity and importance and requires more and more of special training and fitness. Data of this kind were collected by Worth McClure, of the Gatewood School in Seattle, and were published in the *Elementary School Journal* for June. Replies from seventeen cities, supported by the testimony of certain college professors of education, indicate that principals are being freed from teaching, get better salaries, are more often supplied with clerical assistance, are recognized as experts in the making of courses of study, frequently appear on educational programs, write educational articles, bear responsibility as community leaders, and receive appointment and promotion more and more because of professional training and qualifications. The writer seems none too sure that managerial functions do not absorb the major portion of the principal's attention at present, but rightly hopes these may be subordinated to leadership of the teachers.

WHY IS A SCHOOL?

In view of the natural tendency which men in general have to follow tradition instead of making a fresh analysis, Professor Smith's article on "A Theory of the School" in the *Journal of Experimental Pedagogy* for June is to the point. The writer remarks that some one has collected sixty-seven definitions of education; he will add the sixty-eighth, namely, that a school is a place for realizing impossible ideals. It serves to lessen the imperfections of life. But it should not, therefore, attempt to do what can be better done elsewhere. It cannot, for example, take the place of a good home. One of its chief functions is to maintain and hand on the best national traditions. These ideas are not so novel as the writer seems to think, but they are worthy of fresh emphasis from time to time.

HOW TO MEASURE [1]

Since its beginning, standardized and scaled mental measurement, both in and out of the schools, has evolved with phenomenal rapidity. Yet at no time has such rapid progress occurred as during the last three or four years. In view of this rapid evolution there are those who feel that no book dealing with mental measurement is justified unless it makes substantial original contributions or, at least, reports recently developed techniques. Those who feel thus will be annoyed by this book by Wilson and Hoke, for anyone who has read one or more of the previous books on educational measurement will find little in this one that is novel.

Whether or not such critics are right does not especially interest me. I am interested, however, that those who read the book shall understand that the techniques for the practical uses of mental measurement in education

[1] How to Measure, by G. M. Wilson and Kremer J. Hoke. New York: The MacMillan Company, 1920.

have been carried far beyond what is indicated in this book. The mention of two such lines of development will suffice. In the first place, methods have been evolved for combining the results of several tests, thereby permitting many practical uses otherwise impossible. In the second place, much progress has been made in the interpretation of certain tests in the light of others, as, for example, the interpretation of educational tests in the light of intelligence tests. Both of these very significant developments are practically ignored in Wilson and Hoke's book.

In view of the fact that most of the important centers for distributing test materials have for sale sample packages of tests, together with full instructions for applying and scoring them, there are those who feel that it is unjustifiable to take up a large percentage of a book merely in compilation—merely in reproducing the tests and describing the routine procedure for applying and scoring them. Because of the frequent improvement in tests such a book will be short-lived inevitably. Those who feel thus can expect considerable annoyance in reading this book.

Now that I have forwarned those who are looking for original or novel ideas and stimulated the protective mechanism of those who are annoyed by routine, let us consider the bias of still another group of critics. There are those, and their number is very large, whose knowledge of the principles, practices, and possibilities of mental measurement in education is substantially zero. They desire a book which takes nothing for granted, which gives as clearly and simply as possible only the first simple steps from the selection of a single test to remedial prescriptions based upon the results from that single test. Those who feel thus will be greatly pleased by this book by Wilson and Hoke. In simplicity, clearness, and practical helpfulness it is at least the equal of the best books in this field and is better than most, and in its up-to-dateness it is the superior of all.

WM. A. MCCALL.

THE NEW BOOKS

The Organization and Curricula of Schools. By W. G. Sleight. New York: Longmans, Green & Co., 1920. Pp. 264. $2.00 net.

To establish a point of view rather than present details is the author's aim. Though written for English training colleges, the book is informing to Americans as well.

The Redirection of High-School Instruction. By H. G. Lull and H. B. Wilson. Philadelphia: J. B. Lippincott Co., 1921. Pp. 286.

An attempt to discover and organize the functional elements in high-school instruction.

L'education des enfants anormaux. By Alice Descœudres. Neuchatel: Delachaux et Niestlé, 1916. Pp. 434.

Deserving of attention from any interested in the problems of education of defectives. The author is a highly successful teacher in classes for special children in Geneva.

The Socialized Recitation. By Charles L. Robbins. Boston: Allyn and Bacon, 1920. Pp. 100.

A clear exposition of principles and certain specific illustrations.

The Teaching of Geography. By Mendel E. Branom and Fred K. Branom. Boston: Ginn & Co., 1921. Pp. 292.

Reflects the current interest in social methods and problem attack. Numerous references, mainly to the periodicals, are added to the various chapters.

The New Methods in Arithmetic. By Edward L. Thorndike. Chicago: Rand, McNally & Co., 1921.

A very concrete and stimulating presentation of the theories embodied in the author's series of arithmetics, published by the same house.

The Measurement of Silent Reading. By May Ayres Burgess. New York: Russell Sage Foundation, 1921. Pp. 163.

A monograph to accompany the author's Silent Reading Scale, also published by the Sage Foundation. This is one of the simplest of the reading tests now available.

Empirical Studies in School Reading. By James F. Hosic. New York: Teachers

College Bureau of Publications. Pp. 174. Cloth, $2.50. Paper, $2.00.

A scientific basis for the evaluation of method in literature and literary reading-books. Over eighty pages of stenographic reports of lessons are included.

Problem-Solving or Practice in Thinking. By Samuel Chester Parker. Reprinted from the *Elementary School Journal.* Address the Department of Education, University of Chicago. $0.40.

Making a High School Program. By Myron W. Richardson. Yonkers-on-Hudson, New York: World Book Co., 1921. Pp. 27. Kraft binding. $0.75.

A practical scheme for organizing the semester's program in any high school.

The Project Method. By John Alford Stevenson. New York: Macmillan Co., 1921. Pp. 305. $1.80.

Devoted mainly to a critical survey of various definitions of the project method and to the author's own distinctions. A few concrete applications are included.

Psychology for Normal Schools. By Lawrence Augustus Averill. Boston: Houghton Mifflin Co., 1921. Pp. 362.

An attempt to select and simplify those phases of psychology likely to be grasped and used by first- or second-year normal-school students. Study apparatus and reading references are appended to each chapter.

The Principles of Teaching in Secondary Education. By Herbert H. Foster. New York: Charles Scribner's Sons, 1921. Pp. 367. $1.75.

Differs from most recent works in this field in that the discussion is confined to teaching as such and does not attempt to deal with other problems of high-school education.

Arithmetical Essentials, Book I. By J. Andrew Drushel, Margaret E. Noonan, and John W. Withers. Chicago: Lyons and Carnahan, 1921. Pp. 304.

Special emphasis is laid on presenting the situations in which the various processes have their actual uses.

The Alexander-Dewey Arithmetic, Elementary, Intermediate, and Advanced Books. By Georgia Alexander. Edited by John Dewey. New York: Longmans, Green & Co., 1921.

The authors of this new series have attempted to give greater reality to the processes to be mastered by means of "socialized recitations" and problems drawn from daily life.

Junior High-School English, Book I. By Thomas H. Briggs, Isabel McKinney, and Florence Skeffington. Boston: Ginn & Co., 1921. Pp. xiv+395.

This volume, the first of a series of three, is for the seventh grade.

Effective English Expression. By Edward H. Webster. New York: Newson & Co., 1920. Pp. 323.

A simple high-school text in which the author aims to arouse specific purposes in the minds of the pupils.

Business English Projects. By W. Wilbur Hatfield. New York: The Macmillan Co., 1921. Pp. 303.

A high-school text in a new vein. Suggestive as to possibilities in the grammar grades.

A Study of Poetry. By Bliss Perry. Boston: Houghton Mifflin Co., 1920. Pp. 396. $2.25.

A companion to the author's well-known *Study of Prose Fiction* and like that intended both for college classes and for general reading.

A Study of the Types of Literature. By Mabel Irene Rich. New York: The Century Co., Pp. 540.

Intended as a textbook for the fourth year of high school. Numerous complete selections are included and are accompanied with questions for study and lists for wider reading.

Poems of the English Race. By Raymond Macdonald Alden. New York: Charles Scribner's Sons, 1921. Pp. 410.

Pieces chosen primarily for their interest and arranged chronologically under the two divisions of narrative and lyrical poetry.

One-Act Plays by Modern Authors. Edited by Helen Louise Cohen. New York: Harcourt, Brace & Co., 1921. Pp. 342.